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Electro-Voice®
a gulton company

Model CL-1 Dynamic Cardioid Microphone

SPECIFICATIONS

Generating Element:

Dynamic

Frequency Response:

80 to 12,000 Hz (see Figure 2)

Polar Pattern:

Cardioid (see Figure 3)

Impedance:

Low Z, balanced

Output:

-61 dB

(0 = 1 mW/10 dynes/cm²)

EIA Sensitivity:

-155 dB

Diaphragm:

Tough, non-metallic Acoustalloy®

Case:

Rugged pressure cast zinc body with steel screens

Finish:

Armourmatte

Dimensions:

55.0 mm (2.16 in.) diameter

168.0 mm (6.63 in.) long

Net Weight:

252 g (8.9 oz)

Connector:

Standard three pin audio at mike (XLR)

Accessories Furnished:

358 adapter

458 zippered protective vinyl carrying pouch

Optional Accessories:

376 windscreen

379 color coded windscreens

541 — 25 ft professional cable with A3F type connector at mike end

542 — 25 ft professional cable with A3F & A3M type connectors

543 — 25 ft professional cable with A3F & A3M type connectors

544 — 50 ft professional cable with A3F & A3M type connectors

GENERAL

The Electro-Voice Model CL-1 microphone features a rugged dynamic element in a resilient internal mounting that greatly reduces output noises due to handling and mechanical shock. The smooth wide range response and cardioid pickup pattern combine to produce excellent results in especially difficult situations where feedback is a problem. A steel and die-cast zinc case completes the rugged assembly of this economical microphone. From hand or stand, vocal, instrumental, or P.A. your Electro-Voice CL-1 is built to give you years of dependable service.

DESCRIPTION AND APPLICATIONS

The new Electro-Voice CL-1 combines high output level and smooth frequency response in an economical but handsomely designed product. These models are single-D cardioid microphones which emphasize low frequencies in the same manner most entertainer mikes do when held "close-up." A fine choice for sound reinforcement, public address and other applications where quality and price are of prime consideration. The CL-1's use the broadcast standard three pin audio connector.

A new head design provides wide linear response for effective gain-before-feedback in sound reinforcement applications. An extremely effective shock absorber isolates the transducer assembly from mechanical noises. An internal Acoustifoam™ filter allows close talking without excessive "P-popping" and prevents dirt and magnetic particles from accumulating on the diaphragm.

Using The Variable Low Frequency Response

The low frequency response of the CL-1 varies with the distance of the sound to the microphone as shown in the response curve (Figure 2). Maximum bass response is produced in close up use with the microphone 1/4-inch from the sound source (Figure 2A). Normal bass response is experienced at distances greater than 24 inches (Figure 2C). Intermediate working distance shown in Figure 2B.

Useful special effects can be created by an imaginative application of the variable low frequency response:

1. By working closer to the microphone, the human voice will sound more robust, although intelligibility may be adversely affected.
2. Feedback in a public address system is sustained by reflection of sound into the microphone. For all microphones, as the artist moves closer, the level of his voice (at the microphone) increases and the microphone's signal to the amplifier is increased. For a constant volume of sound from the system, the amplifier gain setting must be proportionately reduced. This results in a reduction in the system's sensitivity to reflected sound, hence a reduction of the tendency to feedback.

The variable low frequency response provides a further feedback reducing advantage in close talking applications. At 1/4-inch low frequency response

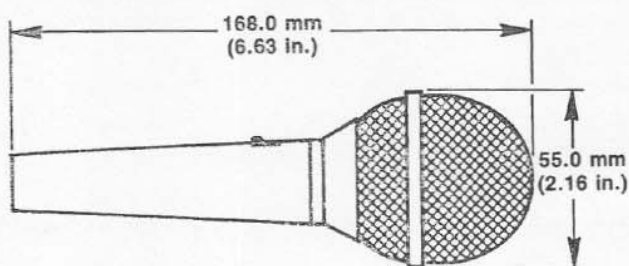


FIGURE 1
Dimensions

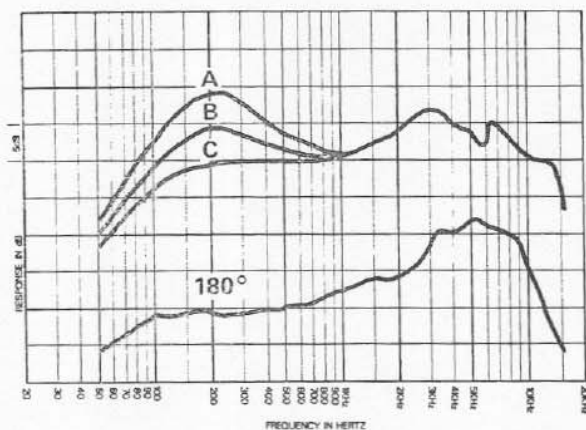


FIGURE 2
Frequency Response

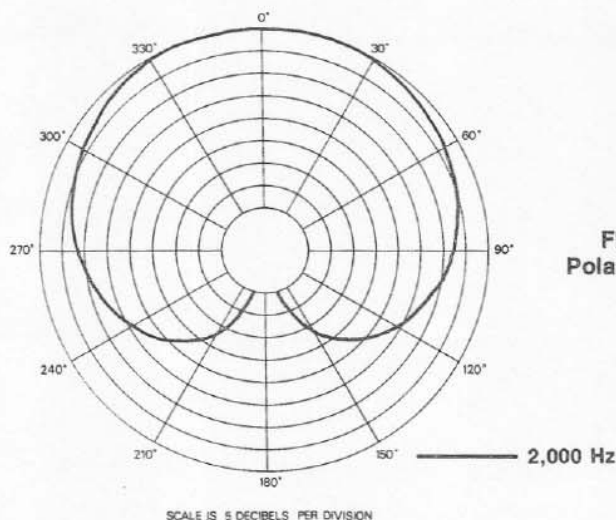


FIGURE 3
Polar Response

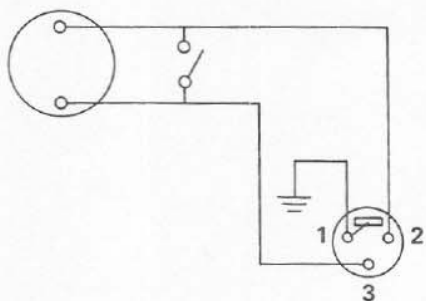


FIGURE 4
Wiring Diagram, Lo-Z

is greatly enhanced, while response to distant sound (as from sound system loudspeakers) is unaffected. The result is a reduced tendency to feedback over and above that provided by the cardioid directional characteristic alone. In short, system sensitivity reduction because of close working, added to the advantage resulting from the bass boosting low frequency characteristic of the CL-1, makes this instrument an exceptionally effective tool for stage and nightclub use.

- For musical pickup, the variable bass response can be utilized to achieve "clean" bass at distances of 24 inches or more. By moving the CL-1 to a few inches from the instrument, bass will be increased.

WARRANTY (Limited)

Electro-Voice CL-1 Microphones are guaranteed against malfunction from any cause for a period of two years from date of original purchase. Also, these microphones are guaranteed without time limit against malfunction in the acoustic system due to defects in workmanship and material. Any active electronics incorporated in the microphone are guaranteed for three years from date of original purchase for parts and labor against such malfunction. If such malfunction occurs, microphone will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not extend to finish, appearance items, cables, cable connectors, switches, or malfunction due to abuse or operation under other than specified conditions, nor does it extend to incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. Repair by other than Electro-Voice or its authorized warranty service agencies will void this guarantee. A list of authorized warranty service centers is available from Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (AC/616-695-6831); Electro-Voice, Inc., 3810 148th Avenue, N.E., Redmond, WA 98052 (AC/206-881-9555) and/or Electro-Voice West, 8234 Doe Avenue, Visalia, CA 93291 (AC/209-651-7777). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107.

Specifications subject to change without notice.



ELECTRO-VOICE, INC., 600 Cecil Street, Buchanan, Michigan 49107

MANUFACTURING PLANTS AT ■ BUCHANAN, MI ■ NEWPORT, TN ■ SEVIERVILLE, TN ■ REDMOND, WA ■ GANANOQUE, ONT
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